

### **REMARKS**

Claims 1-8 were pending in the present application. Claims 9-20 are newly added to further clarify features of the claimed subject matter. Support for the claim additions can be found in the original specification at least at pages 10, 11, 13, 15, 18, 22, 31, 33, 37, Figures 1, 2, 4, 10, and 20. Claims 9-20 are presented and directed to subject matter of the original disclosure. No new matter has been introduced by these amendments.

Claim 1-20 are for consideration upon entry of the present Amendment. Applicant requests favorable consideration of this response and allowance of the subject application based on the following remarks.

#### **Preliminary Issue Re: Rejection of Claim 1**

Applicant directs the Office to Claim 1. The Office did not provide any citations in the reference, David, showing “wherein the height parameters correspond to parameters used in the model”, as recited in Claim 1. While Applicant considers the merits of the Office’s evidence and reasoning, Applicant respectfully requests clarification.

Furthermore, Applicant has read the reference, David, and could not find the recited features of Claim 1, as mentioned above. Instead, Applicant finds that David is directed to monitoring the medical condition of a subject (col. 1, lines 23-25). The reference tracks changes in gait to indicate difficulty with neurologic and musculoskeletal functions (col. 3, lines 27-30). Thus, David is not similar in operations or functions to Applicant’s claimed subject matter.

### *Claimed Subject Matter*

For purposes of clarification, Applicant directs the Office to various portions of the instant application. In particular, Applicant directs the Office where Applicant has discovered a source of a problem with respect to identifying a person based on video analysis of the person's gait (Specification at page 3). The causes of the problem are the complexities of human locomotion and real-world conditions affecting gait analysis (Specification at page 2). In particular, factors impacting a person's gait behavior, resolution of the video, and environmental conditions may be difficult to predict, resulting in gait analysis with a considerable degree of error (Specification at page 3).

Applicant has discovered a solution for the problem. The solution includes use of motion-based biometric analysis. As described in the Specification at page 3, an exemplary technique provides improved accuracy, reliability, utility, and/or efficiency by identifying an ambulatory person based on video analysis of the person's gait. While none of the claims have been rejected under 35 USC §103, Applicant nonetheless directs the Office to MPEP §2141.02, where the pending claims should be viewed as a whole in light of this information.

### *Claim Rejections 35 U.S.C. §102*

Claims 1-8 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,816,603 B2 to David et al. (hereinafter "David"). Applicant respectfully submits that Claim 1 is not anticipated by David. Anticipation under §102 requires that each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference (MPEP §2131).

**Independent Claim 1** recites:

A method for determining height parameters that describe a dynamically varying height of an ambulatory subject based on video analysis of the subject, comprising:

acquiring a sequence of images that collectively captures the gait of the subject;

measuring a dynamically varying height function of the subject based on an analysis of the varying height of the subject in the sequence of images; and

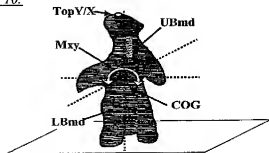
fitting the dynamically varying height function of the subject to a model that describes varying height,

wherein the height parameters correspond to parameters used in the model.

In contrast, David is directed to **monitoring the medical condition** of a subject (col. 1, lines 24-25). Motion portraits are used to determine the existence of trends demonstrating improvement, deterioration, or no change in a subject's condition (col. 14, line 67 to col. 15, line 3).

First, in setting forth a ground of rejection, the Office cited "height parameters" is disclosed by David in Figure 10 (Office Action of page 2), which is reproduced below:

David, Figure 10:



David shows the top of a silhouette "Top Y/X" in Figure 10. Applicant directs the Office to David, col. 14, lines 9-13, which states "**head motion characteristics** (i.e., the slope, the **top-point trajectory**) or, more generally, trajectories of characteristic points .....may also be directly calculated.....". This is not the same as 'height parameters' as in Claim 1.

Second, the Office states the recited “fitting the dynamically varying height function of the subject to a model that describes varying height” is disclosed by David in Figure 9a. The figure is shown below:

David, Figure 9a:

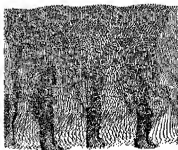


Figure 9a merely shows a motion “**finger print**” of a normal walk to distinguish from the motion finger print of an abnormal walk (col. 13, lines 64-66). David describes the resulting picture provides a unique characteristic **template** of the patient that may be analyzed and compared to **previously stored templates** (col. 6, lines 35-37). This is not fitting the dynamically varying height function of the subject to a model that describes varying height.

The evidence in David, cited by the Office, does not disclose expressly or inherently “height parameters and fitting the dynamically varying height function of the subject to a model that describes varying height”, as recited in Claim 1. Applicant respectfully submits that no such features are disclosed by David.

Third, the Office did not provide any citations in David to show “wherein the height parameters correspond to parameters used in the model”, as recited in Claim 1.

Fourth, the claimed subject matter and David are different in operations and functions. David compares silhouette images or outline images of the subject (col. 5, lines 60-61) to previous or good health images of the subject to draw diagnostic conclusions (col.

15, lines 6-11). David is tracking changes in gait to indicate difficulty with neurologic and musculoskeletal functions (col. 3, lines 27-30). Therefore, David is not similar in operations or functions as Applicant's claimed subject matter.

Consequently, Applicant asserts David fails to anticipate independent Claim 1 because David does not disclose "height parameters and fitting the dynamically varying height function of the subject to a model that describes varying height" of the claimed subject matter. Accordingly, Applicant requests that the §102 rejections be withdrawn.

**Dependent Claims 2-4** depend directly from Claim 1 and thus are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features that, in combination with those recited in Claim 1, are not disclosed by David.

**Independent Claim 5** recites features similar to those in Claim 1 and hence benefits from the same arguments directed above to Claim 1.

**Dependent Claims 6-8** depend directly from Claim 5 and thus are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features that, in combination with those recited in Claim 5, are not disclosed by David.

#### **New Claims**

**Claims 9-20** are newly added to further clarify features of the claimed subject matter. Support for the claim additions can be found in the original specification at least at pages 10, 11, 13, 15, 18, 22, 31, 33, and 37 and Figures 1, 2, 4, 10, and 20. Claims 9-20 are

presented to provide additional scope of protection commensurate with the original disclosure.

**Conclusion**

Claims 1-20 are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of the subject application. If any issue remains unresolved that would prevent allowance of this case, the Office is requested to contact the undersigned attorney to resolve the issue.

Respectfully Submitted,

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